

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 74.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012775**Date Inspected:** 18-Mar-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 740**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1720**Contractor:** Goodwin Steel, UK**Location:** Trentham, UK**CWI Name:** N/A**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Cable Band Castings**Summary of Items Observed:**

The following report is based on Caltrans METS QA Inspector Mr. Mike Brcic's observations at Goodwin International (GI), Trentham, UK on 18 March 2010.

**MATERIAL RELEASE:**

Two cable band (4 castings) have been released to paint/coating, South Staff Coating, Tipton, UK. Caltrans Lot # of B275-006-10 has been assigned by METS QA Inspector, Mr. Mike Brcic this day 18 March, 2010. A green tag of release has been affixed to the shipping document for Panel Points WPP82 and WPP90, both were B3 cable bands. See report, TL6011, dated 03/18/2010 for more specifics.

**SHOP REVIEW:**

While this Caltrans QA Inspector was on site, GI, he had opportunity to review the progress of current castings located in the machine shop. The following castings and there current status, as they were observed this day by the Caltrans Inspector, is reflected here:

~ GG29446-6, B14-CBT Strongback, located at station known as BTF-2, is being machined at its joint face, fulfilling step F4 of Manufacturing Inspection Test Plan 12-02-2009 (MITP), and machined to drawing 5540-B14-CBT specifications.

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~ GG29429-9, a B7 cable band half, located at station identified as BTF-2, is being machined at joint faces, currently slots located at bolt bosses are being machined.

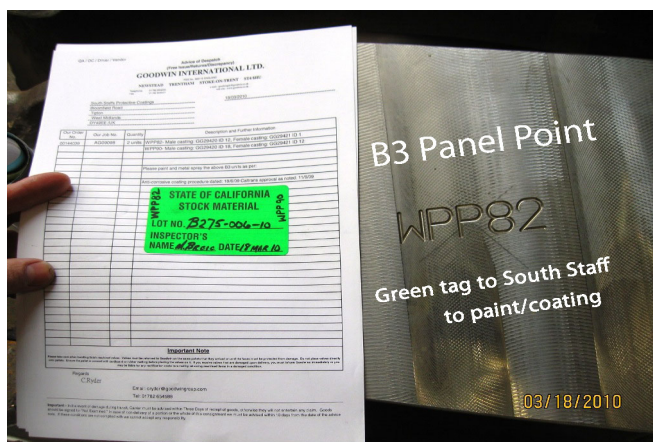
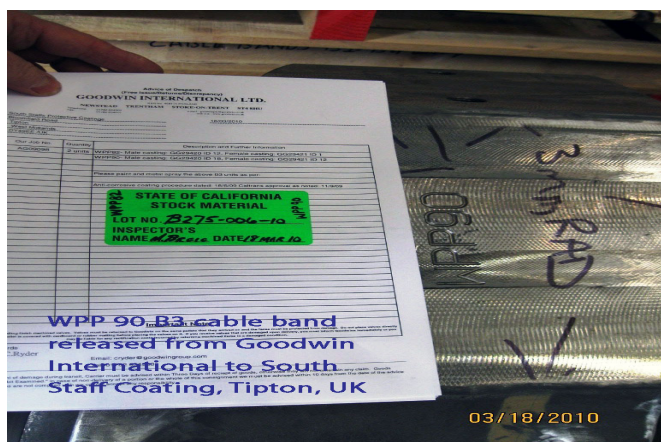
~ EPP12, GG29428-4 and GG29429-9, B7 cable band, has had a rough bore, machined per step I2 of the MITP, at station known as Webster/Bennett vertical Bore. During observation it was noted that this casting is one that has been stamped with F7635, as opposed to the assigned Heat number of F7638. The QC personnel has attached blue quarantine card to the Route Card to assure the incorrect number is obliterated and the correct number is stamped prior to Final Inspection.

~ EPP72, GG29422-8, GG29423-13, Cable Band B4, cable band, located at machining station known as TSS30 is final machining to the bore, creating a .25mm grooved surface called out by drawing 5540-B4-1-M/F, Typical Groove Section view, found at grid F10.

## REPAIR WELDING

~ GG29423-8 (B4-1-F) This QA Inspector observed welder Dan McDonagh, DM596, performing Shielded Metal Arc Weld (SMAW) process, 5mm, E7018-1 electrode, in the 2G, horizontal position. Parameters of WPS 04-0120F4B issue 5, were verified and followed, Amp average during observation was 163 voltage was 24.1. Temperature of casting exceeded 170° Celsius (preheat) and was below 371° Celsius for an interpass temperature, these were the actual temperature limits verified by the use of temperature melting sticks. Travel Speed of second pass was 150 mm/min. Excavation in work was identified as #2R1, weld build up of 68mm height of the rope groove, classified as "Major", on the approved Weld Excavation Map, and will, therefore, be post weld heat treated subsequently.

Unless otherwise noted, all observations reported on this date appeared to be in general compliance with applicable contract documents.



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## Summary of Conversations:

See above for conversations that this QA Inspector was a party to.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy, 1(510)385-5910, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Brcic,Michael	Quality Assurance Inspector
<b>Reviewed By:</b>	Edmondson,Fred	QA Reviewer

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